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ABSTRACT

This paper was designed to provide background information for participants of the "Statewide Evaluation of Programs and Services with Students with Disabilities" Policy Forum scheduled for August 30 and 31, 1994. The paper provides information regarding program evaluation issues, to stimulate discussion and to give examples of resources available to assist State education agencies in planning and implementing program evaluation procedures as required annually by Federal law. Twenty-eight documents and reports are abstracted to provide specific perspectives and recommendations regarding the range of special education program evaluation issues and challenges. The reports include, among others, products of the National Center on Educational Outcomes, the National Center for Policy Options in Special Education, and Project FORUM of the National Association of State Directors of Special Education. (JDD)

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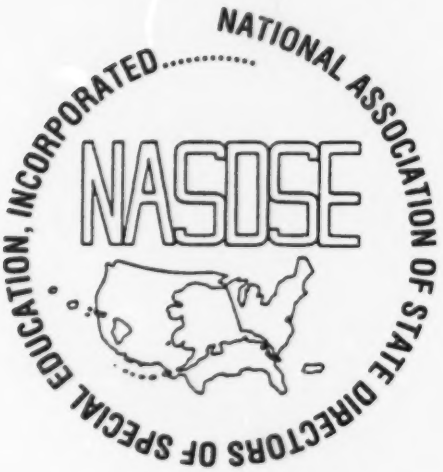
ED 374 588

EVALUATING THE IMPACT AND EFFECTIVENESS OF SPECIAL EDUCATION BASED ON PROGRAM AND STUDENT OUTCOMES

Review of Selected Reports, Documents, and Articles

By Judy Schrag

August 1994



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FOREWORD

This paper is done under Project FORUM, a contract funded by the Office of Special Education Programs at the U.S. Department of Education and located at the National Association of State Directors of Special Education (NASDSE). Project FORUM carries out a variety of activities that provide information needed for program improvement, and promote the utilization of research data and other information for improving outcomes for students with disabilities. The Project also provides technical assistance and information on emerging issues, and convenes small work groups to gather expert input, obtain feedback, and develop conceptual frameworks related to critical topics in special education.

Federal law requires that each State provide for procedures for evaluation at least annually of the effectiveness of programs and services for children with disabilities. With the passage of GOALS 2000 and on-going statewide education reform efforts, special education program evaluation is a dynamic and complex issue and process. The purpose of this paper is to provide background information for participants of the *Statewide Evaluation of Programs and Services with Students with Disabilities* Policy Forum scheduled for August 30-31, 1994. It was undertaken as part of Project FORUM's work during the second year of the contract. This paper provides information to Forum participants regarding program evaluation issues and perspectives of other authors/researchers. It is intended to stimulate Forum discussion and to give examples of resources available to assist State Education Agencies in planning and implementing statewide program evaluation procedures.

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EVALUATING THE IMPACT AND EFFECTIVENESS OF SPECIAL EDUCATION BASED ON PROGRAM AND STUDENT OUTCOMES

Review of Selected Reports, Documents, and Articles

Background

The Individuals with Disabilities Education Act (IDEA) requires each State Plan to "provide for procedures for evaluation at least annually of the effectiveness of programs in meeting the educational needs of children with disabilities (including evaluation of individualized education programs)...." (Section 1413(a)(11)). In addition, Section 435(b)(4) of the General Education Provisions Act (GEPA) calls for the State to evaluate the effectiveness of covered programs (including the IDEA) at least every three years.

In addition to Federal requirements, the education reform movement of the past ten years has resulted in a shift from documenting the process of educating students to demonstrating positive outcomes. Legislators, governors, State and local boards of education, and the public all are demanding more program accountability within the context of education reform. Financial constraints have also prompted an additional need to ensure maximum program effectiveness. State Improvement Plans that will be required under the provisions of the newly-passed GOALS 2000, Educate America Act, must have procedures for improved governance and management. Educators at each level of governance continue to document educational effectiveness for all students, including those with disabilities, with many different kinds of accountability practices.

Accountability and program improvement are primary reasons for implementing statewide evaluations of educational programs for all students, including those with disabilities. An overall assumption of this paper is that statewide educational program evaluation systems must include evaluation of program outcomes and impact upon students with disabilities. In addition to information gathered for all students, statewide program evaluation systems should have the capability of gathering information specific to programs and services provided for students with disabilities (e.g., post school employment, impact of specific types of intervention, etc.).

Purpose of this Document

As stated in the foreword of this paper, the purpose of this document is to provide background information for participants of the upcoming program evaluation Forum, August 30-31, 1994, Arlington, VA. It is meant to serve as a Forum resource and to stimulate discussion at this upcoming event. Twenty-eight documents and reports related to special education program evaluation have been abstracted to provide specific perspectives, information, and recommendations regarding the range of special education program evaluation issues and challenges. The abstracts are in alphabetical order by author. This document also provides information in a single source regarding work on the topic of program evaluation by policy analysts and researchers including those from some of the projects that have been supported by

the Office of Special Education Programs (OSEP), U. S. Department of Education, including the National Center on Educational Outcomes and the National Center for Policy Options in Special Education, and Project FORUM of the National Association of State Directors of Special Education. The level of specificity of summary information within this paper varies for specific documents reviewed and summarized. This varying level of content specificity relates to the nature of the Program Evaluation Forum agenda and is intended to provide specific resource information and to stimulate discussions among the Forum participants.

Summary of Selected Program Evaluation Documents and Reports

Ahearn, E. 1992. *An analysis of state compliance monitoring practices.* Alexandria, VA: National Association of State Directors of Special Education, Project FORUM.

- Current monitoring practices were analyzed from several sources: discussions with monitoring personnel in selected States, responses to a survey conducted by the Regional Resource Centers in June, 1992, input received at meetings and conferences, and policy and other documents.

- The author found that many States are examining their monitoring practices and considering changes to make the process less confrontive.

- The topic of using information about student outcomes as a part of compliance monitoring is receiving increased attention in the States.

- A number of States are using focused/targeted monitoring.

- A lack of correlation between compliance monitoring and program effectiveness was noted by participants involved in this study.

Berkowitz, S. 1993. *A guide to conducting stakeholder-based evaluations for state agency/federal evaluation studies projects.* Rockville, MD: Westat, Inc.

- This paper provides an overview of stakeholder-based approaches to conducting evaluation studies, and presents key considerations that should be involved in using stakeholder-based evaluations.

- Stakeholder-based evaluation involves active participation in the evaluation process by stakeholder groups whose interests are affected by the program being evaluated or whose decisions can influence the direction of the program.

- The impetus for this type of evaluation has been that evaluation results were generally not being used. Evaluation research often has too narrow a focus, unrealistic outcome standards, and lacks responsiveness to the practical and policymaking needs of the various and often disparate constituencies involved.

- Stakeholder-based evaluation has emerged to help promote greater use of study results, to get constituencies more invested in the process and products of research, and to make evaluations more responsive to diverse needs. Stakeholder-based approaches work especially well for evaluations that seek to integrate and reconcile diverse perspectives on a given issue or program. The role of stakeholders include framing the evaluation questions or at least reacting to/revising evaluation questions.

- Using stakeholder-based evaluation involves making decisions on a number of issues, including determining availability of stakeholders, selecting the stakeholders, deciding how and when stakeholder involvement can most effectively be used, finding appropriate and flexible organizational arrangements for conducting the evaluation, developing a workable role for the evaluator, and establishing clear expectations among stakeholders and project personnel regarding the roles to be played in the evaluation.

- There are a variety of ways in which stakeholders may be involved in developing and assessing the evaluation design and methods; e.g., participating in the creation of the design and providing substantive direction to the evaluation design while the researchers handle the technical aspects.

- Stakeholder feedback in instrument development and revision is particularly important in validating the content of instruments, and to ensure that the appropriate topics are included so that the face validity of the items is high.

- The following strengths and weaknesses of stakeholder evaluation are also provided within this report:

    - It results in greater stakeholder ownership of the evaluation process and results.
    - There is shared accountability.
    - Use of stakeholder-based evaluation may entail loss of control over the evaluation design by the evaluator which, in turn, may mean diminished methodological rigor of the evaluation.
    - There is a trade-off between a tight design and greater participation. Conflicts can occur between a top down approach and a participatory paradigm.
    - In stakeholder-based evaluation, active participation in the evaluation by stakeholders with diverse interests makes for articulation of a greater variety of views than is typical in most evaluations, but it may also be difficult to effectively reconcile stakeholder differences.
    - Some differences of opinion among stakeholders are to be expected, but too much disagreement, especially when it is not productively channeled, can be debilitating.
    - In stakeholder-based evaluation, there is less separation between process and product—and more interactive feedback over the course of the evaluation than is typically the case in most evaluations.
    - People who are heavily task and product oriented may become impatient with the amount of attention and energy that gets devoted to process.

- A stakeholder-based approach is generally not the most efficient way of finding answers to the evaluation questions because it is time consuming.

Brauen, M., O'Reilly, F., & Moore, M. 1994. *Issues and Options in Outcome-Based Accountability for Students With Disabilities*. College Park, MD: University of Maryland

- The purpose of this document is to create awareness of the issues related to including students with disabilities in outcome-based accountability systems and to provide options for implementing such systems.

- A framework is provided for creating an outcome-based accountability system that includes students with disabilities. The focus of the document is outcome-based accountability at the local level.

- Issues and options are presented according to four critical decisions that must be made in creating an outcome-based accountability system:

  - selecting outcomes for all educational programs;
  - establishing performance standards;
  - identifying assessment strategies; and
  - identifying accountable parties.

- Following the issues options, there is a series of steps provided that are necessary to put an outcomes-based accountability system into practice.

- Within this document, the term "outcome-based" emphasizes the central role of student outcomes in a system of accountability rather than compliance with procedures and practices. Accountability means a systematic method to ensure those inside and outside the educational system—both schools and students are moving toward desired goals.

- Outcome-based accountability requires assessment of outcomes and routine reporting of student performance using agreed-upon outcomes.

- Two major approaches to consequences within accountability systems are discussed: those that involve the automatic imposition of sanctions or rewards and those that rely on the public disclosure of results.

DeStefano, L. 1993. *The effects of standards and assessment on students in special education*. Synthesis Report 10. Minneapolis, MN: University of Minnesota, National Center on Educational Outcomes.

- This paper provides an overview of the demographic characteristics of students in special programs, outcomes of schooling, and the nature of special education programs and services.

- Given the high incidence of risk factors and poor outcomes associated with education, students with disabilities need the benefits of an accountability-based school reform focused on educational outcomes.

- Since the majority of instruction for students with disabilities takes place in regular classes, regular educators should assume responsibility for their learning.

- Effective schools have a shared vision. Outcome-based accountability for all students is difficult to achieve unless programs and activities have a common set of goals for all students and a shared vision of the standards.

- While a procedural focus on safeguards and compliance in special education has had its benefits, outcome-based reforms require the system to go beyond—to judge the schools and students in terms of outcomes by applying rewards and sanctions based on these outcomes.

- A dilemma exits between the conflicting priorities of reaching higher school performance scores and the emphasis on inclusion of students having difficulty developing the skills assessed.

- Some have seen IEPs as an alternative to participating in statewide testing for accountability purposes. However, the IEP is designed to monitor progress toward the achievement of short term objectives and annual goals rather than long term progress. The IEP is not valid for program monitoring or individual student assessment without a consistent framework for tying IEPs to goals and standards (Olsen & Massanari, 1991).

- Challenges of including special education students in large scale assessment include identifying ways of modifying administration procedures to make assessment accessible for all students and creating alternate ways of gathering performance information related to overall standards and needs of individual students.

- In order to be valid, the measurement characteristics of an assessment system must be reflective of the diversity of students it represents. Multiple data gathering strategies should be utilized to accommodate the unique assessment needs.

- Determining the appropriate level of aggregation for reporting assessment data is another difficulty in designing an accountability system that represents a diverse student population.

- This report includes several strategies for increasing the positive impact of standards and assessment for students in special education (adapted from Sawyer, Warren, and McLaughlin, 1992):

    - Consensus should be made known on the underlying assumptions and framework for an outcome-based accountability system that includes students with disabilities.

- The parties who are being held accountable for the outcomes of special education students and all students should be made known.
- A set of agreed upon outcomes and standards of performance with relevance for all students should be developed.
- Appropriate sources and measures of outcome data should be determined.
- A system should include reporting formats that allow for aggregated and desegregated reporting.
- The unintended consequences of a system of accountability for students in special education and other diverse groups should be assessed through action research.

DeStefano, L. & Wagner, M. 1990. *Outcomes assessment in special education: Lessons learned.* Urbana-Champaign, IL: University of Illinois

- This report provides a synthesis of studies in special education outcome assessment conducted as part of the State Agency/Federal Evaluation Studies (SAFES) program. The SAFES program was established in 1983 with the passage of the EHA Amendments of 1983 (P.L. 98-199), Section 618. The Congressional intent in creating this program was to promote cooperative efforts between States and the Federal government in generating evaluation information to impact special education programs at the Federal, State, and local levels.

- Although outcome assessments differ widely in design, measures, and data collection approaches, they have a common focus on outcomes as individual achievements, statuses, or behaviors.

- Assessment of special education outcomes can be broad (e.g., describing current employment status of special education graduates at a national, State, or local level) or more specific focusing on testing a particular hypothesis or on examining the effects of a specific intervention or system change.

- The funded SAFES projects described within this report cover four focus areas: (1) evaluating the effectiveness of special education statewide; (2) comparing the effectiveness of alternative methods of special education service delivery; (3) assessing the impact of secondary programs on post-school outcomes; and (4) investigating the impact of minimum competency testing and/or increased graduation requirements.

- This paper also outlines several activities related to the process of assessing outcomes:

  - Collaborative planning increases stakeholder's support and use of outcome assessments.
  - Needs assessment should be carried out in the early stages of planning for outcome assessment and should include all stakeholder groups.
  - A conceptual framework is critical to the success of an assessment in that it provides a structure for understanding, interpreting, and acting to influence outcomes.

- A conceptual framework should include both proximal and distal outcomes, key independent variables that are expected to influence outcomes, and indications of the expected relationships among them.
- A conceptual framework can be generic or developed expressly for a specific purpose.

Gonzales, P. 1994. *Effectiveness, compliance, accountability, and program improvement: Perspectives on the evaluation requirement*. Alexandria, VA: National Association of State Directors of Special Education, Project FORUM.

- This document references a recent study by NASDSE (Gonzalez, 1992) in which it was found that the majority of States (94 percent) used compliance monitoring procedures as the predominant program evaluation tool and that program evaluation and compliance monitoring tend to be viewed by State Education Agencies as the same.

- This paper discusses four sub-topics related to program evaluation of special education: suggested linkages and distinctions between effectiveness evaluation and implementation evaluation; linkages between compliance monitoring and the concepts of program improvement and accountability; utilization of evaluation results; and recommendations for a re-conceptualization of the annual evaluation requirement under Part B of IDEA.

- The measurement of outcomes is central to determining the effectiveness at the program or individual level. Outcome evaluation compares actual outcomes with desired outcomes (objectives/goals).

- "Implementation evaluation focuses on finding out if the program has all its parts, if the parts are functional, and if the program is operating as it is suppose to be operating." (Patton, 1986, p. 124).

- Compliance monitoring is one form of implementation evaluation that answers questions such as: "Was the program implemented as designed?" or "Were the mandated guidelines and requirements being met?" Compliance evaluation allows the SEA to identify patterns of compliance within and across districts as well as program strengths and program components needing technical assistance. However, the collection of quantitative data does not provide information regarding contextual variables, or processes; and it does not provide information on where and how to make improvements or the information necessary for program replication.

- Process evaluation focuses on why various things happen, how the parts of the program fit together, and how people perceive the program as a whole (Patton, 1986).

- Component evaluation looks at a specific component of the program rather than the entire program.

- The overall purpose of the evaluation and the use of the results must be considered in the design of a system of program evaluation in special education.

- Program improvement and accountability are two frequently cited reasons for evaluation. They have distinctly different implications for the conduct of program evaluation.

- Program improvement questions include: What are the strengths and weaknesses of the program? How can the program be improved? What is working well and what is not working well? What are the reactions of clients, staff, and others to the program? What are their perceptions about what should be changed?

- Accountability questions include: Is the program implemented as required? (program compliance monitoring) What are the planned and unplanned outcomes? (program effectiveness) DeStefano (1992) has noted that while compliance monitoring and evaluation both contribute to accountability, they are not the same thing.

- There is significant interest across the country in developing a system for combining compliance monitoring and outcome evaluation for accountability purposes.

- This document points out several problems with using outcomes evaluation in the context of accountability; e.g., holding an entity accountably for their performance suggests a system of rewards and/or punishment; a cutoff point between satisfactory and unsatisfactory is needed; and cooperation of participating school districts is needed.

- Evaluation for the purpose of accountability and compliance monitoring serves a "signalling" function.

- Decisions at the Federal and State levels need to be made regarding the overall purpose of program evaluation in special education -- either for accountability or for program improvement.

Gonzales, P. 1993. *State procedures for the evaluation of special education program effectiveness.* Alexandria, VA: National Association of State Directors of Special Education, Project FORUM.

- The purpose of this study was to examine the efficacy of program evaluation under the Individuals with Disabilities Education Act (IDEA) by describing the methods currently used by States to conduct their annual evaluation of program evaluation.

- There are five purposes of evaluation (Wentling, 1989): (1) to convince or gain support; (2) to educate or promote understanding; (3) to secure the involvement of key individuals; (4) to improve programs; and (5) to demonstrate accountability.

- Most of the States utilize compliance monitoring in the annual evaluation sections of the State Plan and Part B Performance Report. Monitoring data sources such as LEA

applications, site visits, or fiscal audits provide very limited information upon which to evaluate the effectiveness of special education programs and services.

- There is an increase in the number of States that use a two-tiered approach to the annual evaluation requirement in which the Local Education Agencies (LEAs) have evaluation requirements and the State Education Agency (SEA) has monitoring requirements.

- There is an increase in the number of States that encourage LEA "self-study" often as a pre-monitoring tool or an evaluation tool.

- There is an increase in the number of States that provide technical assistance to LEAs to help them evaluate their programs and procedures.

- Sixteen SEAs reported that they were supporting short-term studies to evaluate specific issues, projects and/or practices in special education. For example, Kansas funded a study that examined the effects of class-wide peer tutoring on at-risk students' subsequent placement in special education. Minnesota funded a project to evaluate the relative effectiveness of direct language therapy and therapy provided through mainstream collaboration. Some States reported that the results were used to influence policy decisions, State technical assistance priorities or comprehensive system of personnel development (CSPD) plans.

- The annual evaluation sections of source documents from ten States indicated that evaluation reports were required from projects funded by IDEA-B discretionary monies, including model projects initiated by LEAs. Evaluation from individual projects has the potential to influence policy and to engender support for project replication and/or evaluation.

- An additional 14 States reported that they had begun to conduct or fund statewide evaluations of special education, including studies that focus on the post-school status of graduates and on the effectiveness of transition services. Iowa, for example, has funded a 5-year statewide follow-up study of special education graduates using Part B discretionary funds. Maryland is supporting a statewide evaluation study of the status of transition services in schools and community colleges. California State law calls for annual evaluation studies of issues of statewide concern in special education; e.g., pupil performance; placement of pupils in the least restrictive environment (LRE); the degree to which services identified in IEPs are provided; parent and pupil attitudes toward services and processes provided; and program costs.

- The individual education program (IEP) is receiving attention in a number of States for use in program evaluation. The IEP can provide the ideal tool for identifying individual student performance outcomes and assessing student progress. In order to evaluate the IEP, States are using three general strategies: (1) evaluation based on annual review; (2) evaluation by the LEA along with compliance monitoring by the SEA; and (3) evaluation by the SEA. usually collecting data from a sample of IEPs. Examples of

strategies used are LEA guidance for evaluation of the IEP (District of Columbia, Iowa, and Washington); studies of sample IEPs (District of Columbia, South Carolina, and Arkansas); and an Evaluation Activity Guidebook for LEAs (Illinois).

- Some States have begun to investigate ways of collecting data on student performance outcomes for the purposes of evaluating the effectiveness of special education.

- Four States (Indiana, Michigan, Oklahoma, South Carolina) specifically mentioned producing comprehensive technical assistance or guidance documents that encourage LEAs to use student outcomes in the evaluation activities. Connecticut, Delaware, Kentucky, and Maryland are in various stages of implementing statewide requirements for collecting student outcome information as a basis for LEA and/or SEA evaluation.

- Three States (Vermont, Utah, and West Virginia) reported a process in place for collecting statewide information on student outcomes for evaluation purposes.

- Four States (Connecticut, Delaware, Kentucky, and Maryland) indicated they are in various stages of implementing such a process.

- The majority of States (94%) continue to use compliance monitoring procedures as a program evaluation tool. Corrective action following compliance monitoring is equated with implementing program improvements. Program evaluation and compliance monitoring frequently are viewed as the same activity.

- There is a need to promote a balance between the human and fiscal resources necessary for conducting compliance monitoring and program evaluation at all levels of special education administration based upon their relative contribution to improving outcomes for children and youth with disabilities.

- Technical assistance in the area of program evaluation is needed at the SEA and LEA levels.

- State and Federal laws and regulations should avoid restricting the types of program evaluations that can be conducted by SEAs and LEAs. In addition, State and Federal law and regulations should evolve to reflect changes in the educational system as well as national standards and community values.

McLaughlin, J. S. 1988. *Special education program evaluation: An overview.* Blacksburg, VA: Virginia Polytechnic Institute and State University, College of Education.

- Evaluation is a process through which evaluators gather information for decision makers.

- Generally, evaluations are conducted to meet the needs of internal or external people who are making judgments and/or decisions about the program.

- Federal and/or State regulations call for the evaluation of special education programs.

- Aims of evaluation include program improvement, sharing of success, and providing a tool for advocacy.

- Information generated from an evaluation is usually combined with other information; e.g, political, social, economic, and administrative factors.

- There are four facets to most evaluation efforts:

  - statement of evaluation questions which guide the development of the evaluation plan;
  - information gathering (formal or informal);
  - judgement in the interpretation of findings (comparison of the information to some standard or expectation; e.g., from legislation, regulations, guidelines, court decisions, literature, and professional experience); and
  - the decisions about the program under consideration are; to continue it until the standard is met, keep the standard but revise the program, revise the standard, terminate the program, or disseminate the program if it consistently meets the objectives or standards.

- Several steps to planning evaluation are provided within this document:

  - Getting started - This step involves focusing the research.
  - Describing the program - This step provides information about the program in terms of inputs (resources), processes (activities), and outcomes (products or benefits, changes in programs or clients).
  - Developing evaluation questions - Evaluation questions link the program design to the evaluation design and serve as the vehicle through which needed information is provided to the evaluation team. Seven basic questions might be addressed: Are we achieving goals as predicted? Did we achieve our goals? Did we cause the changes in the target? How is the program perceived? What did the program cost? Is the program cost effective? Are students successful after leaving the program?
  - Collecting the information/data - This step involves matching the information/data collection to the information needed to answer the evaluation questions.
  - Planning and carrying out the analysis - The evaluation will result in the collection of a considerable amount of data from various sources. The purpose of data analysis procedures is to reduce raw data to a manageable form to allow for interpretations and/or inference with regard to the evaluation questions. The techniques and presentation strategies should be shared with audience representatives to determine their utility for judgment and decision making tasks.
  - Preparing the report - Reporting closes the evaluation cycle with formal or informal reports and varied formats (written, verbal, audio-visual).

- The author of this paper outlines several strategies that can enhance utilization:

  - Evaluators should identify and involve decision makers at the start of the evaluation process.
  - Evaluation designs must be feasible.
  - The evaluation should be conducted in a legally and ethically responsible way (e.g., protection of the rights of those participating).
  - Evaluations should be technically sound (e.g., reliable, valid and use objective data gathering procedures. Discussions, conclusions, and recommendations must be logically related to results and evaluation questions.
  - Utilization and dissemination plans should be an integral part of the evaluation from the start.
  - The evaluation staff should be cognizant of contextual factors which might facilitate or impede information usage.
  - The evaluation staff should view themselves as change agents.
  - The perceptions of the user will influence the degree to which evaluation results have impact on programs.
  - Multiple source/multiple methods broaden the acceptability of evaluations. Different data gathering strategies (interview, survey, and/or record review) and different sources (parents, teachers, and administrators) can be used to answer the same evaluation question.
  - The evaluation should be anchored to specific program elements.
  - Information retrieval and processing systems should be reviewed.

McLaughlin, M., Pasco, S., Schofield, P., & Warren, S., (University of Maryland); Brauen, M., Heid, C., & O'Reilly, F. (Westat, Inc.); and Moore, M. & Waldman, Z. (Consultants). 1993. *Issues and options in outcomes-based accountability for students with disabilities*. College Park, MD: University of Maryland, Center for Policy Options in Special Education.

- Issues and options are presented within this document according to four critical decisions that must be made in the creation of an outcomes-based accountability system:

  1. Select outcomes for all educational programs
  2. Establish performance standards
  3. Identify assessment strategies
  4. Identify accountable parties

- This document is intended for use at the district and school levels in designing and implementing outcomes-based accountability systems.

- Outcomes-based accountability requires the assessment of outcomes. It also requires that student performance on agreed-upon outcomes is routinely reported and that consequences follow.

- Two approaches to consequences are used: those that involve the automatic imposition of sanctions or rewards, and those that rely on the public disclosure of results to have a consequence.

- The selection of outcomes requires agreement on both long-term and short-term goals of instruction and alignment of the curriculum with the established goals and objectives.

- Performance standards are benchmarks against which student performance can be compared. They also set the agreed-upon outcome expectations for student performance.

- Sources of outcome data include standardized achievement test results as well as curriculum-based assessments; alternative assessments such as portfolios and authentic assessment; functional assessments; school records; and student, parent, or employer surveys.

National Association of State Directors of Special Education. 1993. *A forum to examine policy and practice surrounding the annual evaluation of program effectiveness.* Alexandria, VA: Author.

- This Policy Forum was convened to suggest strategies that can be implemented within the next three years to improve evaluation efforts and orient policymakers, administrators, and advocates to the benefits of program evaluation as an integral part of program improvement.

- Solutions to other barriers restricting the evaluation of program effectiveness were also considered, including resource allocation, lack of technical assistance and methodological issues.

- An overall assumption of this Policy Forum was that evaluation must be perceived as an integral part of decision making, management, and administration.

- In addition, program improvement efforts require systematic evaluation in order to judge their effectiveness and provide guidance for future innovation.

- A concern was noted that evaluation efforts can increase paperwork and take more time away from children. In addition, there is a lack of consensus as to what effective means and how to determine it.

- It is also difficult to evaluate different programs within the context of the total education of the child.

- There is a need to systematically collect consumer satisfaction data from the perspective of students and families.

- Interdistrict differences in the categorization of disabilities, placement criteria, and other variables confound the assessment of effectiveness across school districts.

- There is a need to link State and local level special education evaluation systems with emerging general education evaluation efforts and the inclusion movement.

- There is currently a misalignment between Federal, State, and local needs for evaluation information.

- Attempts to make program evaluation systems serve both accountability and program improvement often creates conflicting messages and incentives for providing accurate and complete information.

- Several recommendations were made by Forum participants:

    - A series of papers should be developed and disseminated regarding what special education policy and practice can contribute to the school improvement movement from special education research on topics such as parent involvement, individualized education, instructional strategies, transition, and cross-agency collaboration.
    - The general education system must include information pertaining to all students. Ways for specific students to achieve or measure these outcomes, however, may vary.
    - There is a need to develop a conceptual model of educational outcomes or indicators of effectiveness that is congruent with models used in general education.
    - The two major problems in assessment of outcomes are: When do you include the assessment of outcomes, and when do you accommodate outcomes in the evaluative process?
    - It is important to identify stakeholder groups and to systematically assess their informational needs. A single evaluation will not address all their needs.
    - There is a need for the Office of Special Education Programs (OSEP), Office of Educational Research and Improvement (OERI), Regional Labs, and Regional Resource Centers to convene groups on a regional basis several times a year to provide evaluation information and training.
    - OSEP should commission a paper that would identify what regulatory and policy initiatives would support the program effectiveness evaluation requirements under the Individuals with Disabilities Education Act (IDEA).
    - There should be an analysis of the progress funded by the State Agency Federal Evaluation Studies program to determine lessons learned related to the evaluation of program effectiveness and to inform State and Federal evaluation personnel of alternative approaches to the broader issues associated with program evaluation.

National Center on Educational Outcomes. 1994. *State special education outcomes: 1993*. Minneapolis, MN: University of Minnesota.

- This report includes the results of the third national survey of State activities in the assessment of educational outcomes for students with disabilities.

- Major findings of this survey include the following:

  - States are attempting to produce better information on the numbers of students with disabilities taking part in statewide assessments.
  - More attention is being directed toward guidelines that help define who participates in statewide assessments, with the apparent goal of increasing the number of students who participate.
  - Guidelines on acceptable testing accommodations and adaptations are being advanced by State assessment programs. There is a trend to allow more kinds of modifications, in both low and high stakes assessments.
  - States implementing nontraditional forms of assessment continue to retain the same approach to including students with disabilities and making accommodations as in their traditional assessments; e.g., that is, many students are excluded.

- Twenty-seven States have more detailed accounts of student time in general or special education.

- Fourteen States collect data on reasons for student dropout.

- Fourteen States that award multiple diploma types keep track of these at the State level for special education students.

- Almost all States that collect participation and exit data use the data in reports for State agencies, legislatures, and local and State Education Agencies.

- The primary outcome areas within State assessment activities are achievement, vocational skills, and post-school status.

- Forty-four regular States and all of the unique States collect State level achievement data that include students with disabilities.

- Thirteen regular States and three unique States collect vocational skills information. Enrollment in vocational education and job placement are the most frequently collected data.

- The most common method of assessment achievement are norm-referenced tests. The most frequently used is the Stanford Achievement Test. Two regular States reported using portfolio assessments.

National RRC Panel on Indicators and Effectiveness in Special Education. 199 . *Effectiveness indicators for special education: A reference tool.* Lexington, KY: University of Kentucky, Mid-South Regional Resource Center.

- This document was the product of the work of a national task force.

- The document is intended to be a resource for State Education Agency administrators; local education agency administrators; teacher groups; and parent groups to move beyond compliance to focus on the effectiveness of regular education, special education, and related services for students with disabilities.

- The document has three purposes: (1) to reduce redundant efforts in the future; (2) to promote common understandings about what characterizes effective education and related services for students with disabilities; and (3) to emphasize the integral relationship between special education and the regular education process.

- Several major themes are emphasized in the document:

  - Inter-relationships between regular and special education.
  - The importance of active parent involvement and participation.
  - Meaningful implementation of the least restrictive appropriate environment (LRE) concept.
  - A focus on the needs, abilities, and interests of individual students.
  - A broad definition of what achievements and outcomes are desirable for students with disabilities.

- Effectiveness indicators are organized into six major areas:

  - Philosophy, policies, and procedures
  - Resource allocation
  - Staffing and leadership
  - Parent participation and community and interagency involvement
  - Instruction
  - Program and student outcomes

- Each category of indicators within the major areas includes a rationale statement followed by a list of specific indicators. The indicator statements vary in specificity, reflecting the variation found in the literature.

- Most indicator statement can be applied to all students.

- Some statements do not apply to all students with disabilities, and are more related to one or more subgroups along the special education continuum, for example an emphasis on independent living and integration into the community would be a particularly relevant outcome criteria for students with more severe disabilities.

- At the end of each category, literature sources are indicated by author and date; published documents and documents produced by a State or local agency are indicated by code. A full bibliography is also provided that gives complete citations for all sources drawn from the literature, and a companion list of other sources and codes.

- The primary goal behind the *Effectiveness indicators* product is to encourage program review, analysis, and improvement. The indicators provide a basis for assessing effectiveness and a structure for organizing evaluation and improvement efforts.

Olsen, K. & Massanari, C. 1991. *Special education program evaluation: What should states consider?* Lexington, KY: University of Kentucky, Mid-South Regional Resource Center.

- SEAs have many reasons to install and maintain State systems for special education program evaluation, regardless of Federal mandates or initiatives for evaluation. Horvath (1985) suggested the following reasons: accountability, public relations, program improvement, and policy development.

- The following are characteristics of an effective SEA special education evaluation system:

  - A clear sense of purpose and philosophy about the development and use of a State program evaluation system for special education;
  - State level consensus on the educational outcomes that are valued for students with disabilities;
  - Provision of ongoing data on the attainment of valued outcomes; Three questions must be addressed in designing a system:
    - What data will serve as indicators of outcome achievement?
    - What formats and procedures are best for collecting the data?
    - How will data be stored for use in decision making?
  - Provision of training and technical assistance for local programs to conduct self-evaluations.
  - Provision of ongoing data on the resources, practices, and results of SEA and LEA special education roles and functions;
  - Procedures for conducting policy studies on identified issues;
  - Policies, procedures, and plans that ensure data based decision making in the SEA about programs; and
  - A consistent SEA practice of reporting to stakeholders on the status of special education programs.

Shriner, J., Kim, D., Thurlow, M., & Ysseldyke, J. 1993. *IEPs and standards: What they say for students with disabilities*. Technical Report 5. Minneapolis, MN: University of Minnesota, National Center on Educational Outcomes.

- While the individualized education plan (IEP) has been applauded as an ideal approach for all students, it has not been the answer to educational service provision. In fact, it

has been found (Lynch and Beare, 1990), that student IEPs had only a vague relationship to the activities of the students' instructional day. However, even if it is not linked to daily programming, it is a formalization of the student's overall instructional framework and a vehicle for comparing a student's status at the beginning of service with the student's status after receiving instructional programs related to annual goals and objectives.

- The NAEP has been the measure of choice for assessment of students in relationship to achieving desired standards or performance levels on a national scale. With the push for reform, the NAEP has been revised to mirror the curricular emphases.

- The purpose of this paper is to describe the degree to which the IEPs of students with disabilities match the established standards and statements of expected performance in the context area of mathematics.

- Mathematics goals and objectives sections of the IEPs of 76 students with disabilities were examined within a large Southwestern urban-suburban district and a small Eastern rural district.

- Examinations of student IEP objectives, district objectives and standards, and sample items from NAEP for mathematics were done within a framework of a model useful in describing mathematics curricula and assessments. The model allowed for categorization of the level of mastery expected (Bloom's revised taxonomy), the nature of material, and the operations required.

- In general, the NAEP sample items were distributed evenly across all three dimensions at both grade 4 and grade 8.

- For level of mastery, there was some emphasis on the higher order skills of comprehension and application.

- District objectives/standards were likely to emphasize the knowledge and computation categories of mastery at grade 4. Student IEPs from both schools addressed almost exclusively lower arithmetic skills on the mastery dimension (knowledge and computation). Less than 15% addressed application (problem solving) processes.

- The IEPs also had more holes in their coverage of materials.

- Although the study utilized a limited sample, the authors concluded that if any of the students reached all of his or her IEP goals and objectives, he or she probably would receive a very disappointing score on the NAPE or a test that closely matched the district objectives/standards.

- There is evidence that the current mathematics instruction for students in general education does not match the recommendations of the National Council of Mathematics.

The NCTM Standards are the underlying framework for the NAEP mathematics exams. They are also the guides that States and school districts are using to revise their math objectives and curricula.

- There is a gap between standards and instructional practices for students with disabilities that is likely to grown even wider in the future. The gap between these standards and the mathematics instruction for special education students is even wider.

- Currently, the national emphasis is on more complex skills and concepts. Individualized education plans and mathematics instruction are focusing on traditional skills and do not include the complexities of problem solving and abstract reasoning.

- Special education teachers must recognize that their students need instruction in critical thinking and problem solving. IEPs should be developed to both remediate basic skills and develop new skills that will help the student meet the standards of his or her district, State, and nation.

Spande, G. & Thurlow, M. 1994. *Matching state goals to a model of school completion outcomes and indicators*. Technical Report 9. Minneapolis, MN: University of Minnesota, National Center on Educational Outcomes.

- One of the NCEO's activities is to determine the extent to which there is correspondence between States' expected outcomes and the outcomes encompassed in the NCEO conceptual model. This document presents the results of this matching process at the level of school completion with seventeen States' lists.

- In general, the matching activity indicated that there is considerable correspondence between domains and outcomes in the NCEO model and State outcomes. Further analysis identified development of creativity an outcome identified by one State, but not the NCEO model.

- The domain-level matching indicated that each of the NCEO domains is addressed by at least two States. The Academic and Functional Literacy domain is included in all 16 States' lists of expected outcomes. The other domains that are frequently covered by most States are Personal and Social Adjustment (14 States), Contribution and Citizenship (3 States), and Physical Health (12 States). Satisfaction is addressed by only two States and Accommodation and Adaptations by 3 States. States range from goals that matched two of NCEO's domains (Colorado and Louisiana), to having goals in all eight domains (Indiana). Most of the States had goals in at least five NCEO domains.

Thurlow, M. 1993. *Implications of outcomes-based education for children with disabilities.* Synthesis Report 6, Minneapolis, MN: University of Minnesota, National Center on Educational Outcomes.

- Outcomes-based education (OBE) is the driving force beyond the movement from Carnegie units to specified graduation outcomes in which students receive high school diplomas based on outcomes, and not just completed coursework.

- The underlying premise of OBE is that all children can learn and succeed and that schools are responsible for ensuring the success of all students.

- Instruction should not be curriculum driven (specific book or set of instructional materials) but rather designed to reach a certain outcome.

- OBE does not promote a specific instructional strategy. Rather, it is eclectic in recommendations for improving instruction.

- OBE has its roots in competency-based education, criterion-based measurement, and mastery learning.

- There have been two major OBE models; e.g., John Champlin's Outcomes-Driven Developmental Model (ODDM), Johnson City, New York; and William Spady's High Success Network (HSN) Strategic Design Model.

- OBM relates closely to several other aspects of educational reform; e.g., school structure and management, community and business involvement, assessment techniques, and accountability.

- Performance assessment is being utilized more and more; e.g., exhibitions, portfolios, essays, oral presentations, etc.

- In theory, OBE is very consistent with the principles of education of students with disabilities in that it supports the belief that all children can learn.

- In some districts within Minnesota, all students within an OBE approach were expected to reach the same outcomes as others. Students were given the extra support necessary to meet these expectations (special tutoring, extended school year, and extra assistance).

- In Kentucky, the 75 developed learner outcomes apply to all students, and well as the evaluation of progress toward these outcomes. New assessment are administered to all students (with a sampling plan) except for a maximum percentage of students (2%) with the most significant cognitive disabilities. For these few students, the assessment system is being modified; however, the desired outcomes remain the same as for all students.

- OBE has some positive aspects related to students with disabilities; e.g., starting from what you want the student to know or do and then designing the instruction to meet that outcome. In addition, grading/assessment students against their own criteria rather than against other students relates closely to the IEP philosophy, assessment for instructional guidance rather than just for accountability, as well as modification in curriculum structures to meet student diversity are also consistent with the philosophy of special education.

- There are also OBE pitfalls; e.g., implementation can stress unrealistic goals, high stakes assessment can have unintended outcomes, outcomes can be made in a manner that does not consider student diversity, and ignores innovative instruction.

Thurlow, M. & Ysseldyke, J. 1993. *Can "all" ever really mean "all" in defining and assessing student outcomes*? Synthesis Report 5. Minneapolis, MN: University of Minnesota, National Center on Educational Outcomes.

- This paper takes the perspective than "all can really mean all" when defining student outcomes.

- Too often, students with disabilities have been excluded in outcomes and instructional programs developments.

- There is confusion in the use of the terms "outcomes," "indicators," and "standards.".

- NCEST considers students standards to include "specification of the content (what students should know and be able to do) and the level of performance that students are expected to attain (how good is good enough).

- Outcomes have been defined as the "results of education," typically including knowledge, skills, and attitudes.

- The National Center on Educational Outcomes (NCEO) model defines six educational outcomes domains and two enabling outcomes domains.

- NCEO has defined an indicator as "a symbolic representation of one or more outcomes..that can be used in making comparisons" (Ysseldyke et al., 1991). Indicators are often the statistics derived from assessment of students related to a particular outcome.

- This report identifies several issues when considering outcomes for all students:

  - **Practically**, it seems to be easier not to include students with disabilities.
  - **Technically**, the measurement of outcomes with typical general education assessment tools is difficult when students with disabilities are included. Certain

types of accommodation and adaptations are needed to compensate for the student's disability.

- **Legally**, the Individuals with Disabilities Education Act (IDEA) is generally not seen as a basis for allowing testing accommodations because it was intended to make available public education rather than to guarantee a particular level of education. Section 504 of the Rehabilitation Act of 1973, however, may be more demanding with respect to accommodations for individuals with disabilities. The impact of the Americans for Disabilities Act on schools is yet uncertain because of the lack of legal precedents.
- **Philosophically**, inclusion is at the heart of the question of involving all students.

♦ There are several ways that "all can really mean all" in defining student outcomes. For example, in assessment of outcomes, a score of zero can be given to any student who did not actually participate in the assessment in order to decrease the exclusion rates of students with disabilities.

♦ It is important to critically look at the outcomes that are defined to be certain that they are essential and broad enough to be relevant for all students.

♦ There are changes needed in the assessment system beyond a single standardized test to measure progress on outcomes.

Ysseldyke, J. & Thurlow, M. 1994. "Students with disabilities and educational standards: recommendations for policy & practice." *NCEO Policy Directions*. Minneapolis, MN: University of Minnesota, National Center on Educational Outcomes.

♦ Standards are statements of criteria against which comparisons can be made. They may be criteria used to measure the quantity or quality of something.

♦ Content standards provide specific knowledge and skills that students should have and be able to do as a result of exposure to the curriculum in each standards-setting area.

♦ Performance standards define how good is good enough and can be used at a variety of levels.

♦ Opportunity to learn standards are sometimes referred to as delivery standards which define the conditions of teaching and learning. Opportunity-to-learn standards establish the basis for achieving high content and performance standards.

♦ This article provides three alternative approaches to standards and merits/limitations for each:

- Using the Individualized Education Program as the basis for student standards, the goals and objectives might be translated into relevant outcomes that match those of

the school district or State. The assessment component may help define acceptable performance.

- A standards for group gains system could be set up.
- A separate system of standards can be created for students in special education.

♦ This article also provides several recommendations for content standards:

- Identify one set of standards.
- Individualize the standards for students receiving special education services.
- Specify the depth and breadth of instruction for each standard.
- Require parent/guardian approval.

Thurlow, M., Ysseldyke, J., & Silverstein, B. 1993. *Testing accommodations for students with disabilities: A review of the literature*. Synthesis Report 4. Minneapolis, MN: University of Minnesota, National Center on Educational Outcomes.

♦ The terms "accommodation," "modification," and "adaptation" are used interchangeably and sometimes convey different meanings. Testing modifications are associated with changes made to the test format itself (e.g., Braille, audio cassette, large-print test versions, reader and large-type answer sheets, etc.). Testing accommodations are associated with changes in the testing environment (taking the test in a different setting and under flexible time arrangements, etc.).

♦ A set of guidelines about acceptable accommodations does not exist based on comprehensive empirical research.

♦ This report provides a review of what is currently known about testing accommodations and adaptations; e.g., a summary of existing literature on testing accommodations, adaptations, and modifications within four topic areas: policy and legal considerations, technical concerns, minimum competency and certification or licensure testing efforts, and existing standards.

Ysseldyke, J., Thurlow, M., & Geenen, K. 1994. *Implementation of alternative methods for making educational accountability decisions for students with disabilities*. Synthesis Report 6. Minneapolis, MN: University of Minnesota, National Center on Educational Outcomes.

♦ The primary way in which national, State, and local educators currently make accountability decisions for students with disabilities is through child count and compliance monitoring which is based on the assumption that application of optimal inputs and processes will lead to positive outcomes for children.

♦ Documentation of the presence of a student in a program (child count) or the compliance of a program with regulations, however, does not tell us whether students are achieving the desired results.

- This document discusses five ways in which States are demonstrating that education works for students with disabilities:

  - **Administration of norm-referenced tests** - States are using State-constructed assessments, commercially available tests, and/or comparisons of the relative performance of students compared to those in other States based on NAEP results (National Assessment of Educational Progress), even though many students with disabilities are excluded from participation in State and national testing programs.
  - **Focus on Results or Outcomes** - The educational outcomes of all students may be measured against a set of standards. Several States have specified desired educational outcomes and use either norm-referenced or performance tests to make judgements about whether students are achieving these outcomes. Baron and Coney have reported that approximately 30 States now have some form of nontraditional test items in their statewide assessment. Of these, nine States list portfolios.
  - **IEP Aggregation** - Policymakers have begun to examine the possibility of collecting data from IEPs using a data base to document the attainment of IEP goals or objectives.
  - **Secondary Analysis of Extant Data** - This approach re-analyzes data that already exists such as achievement information, drop-out data or post-employment data.
  - **Accreditation Program** - An accreditation system can be used for reporting student performance and distributing rewards and sanctions to schools and school districts.

- This document also discusses various issues encountered in attempting to gather accountability data including:

  - attitudes which influence who should be included in State and national assessments and the kinds of data that should be reported for those who participate;
  - commitment by people to the importance of gathering accountability data;
  - agreement on outcomes and standards; sources of responsibility for student learning (e.g., general or special education);
  - extent of inclusion of students with disabilities in State and national assessments;
  - deciding how to report information and what to report;
  - determining the role of the State; using sanctions and rewards;
  - asking whether it is worth it;
  - fear of accountability;
  - local control over developing and implementing education programs;
  - lack of curriculum-test alignment;
  - lack of agreement on how to measure complex skills;
  - students in no-graded classrooms; and
  - absence of utility.

- Various input, process, and outcome data are also discussed that can demonstrate that education is working for students with disabilities.

Ysseldyke, J. & Thurlow, M. 1993. *Self-Study guide to the development of educational outcomes and indicators*. Minneapolis, MN: University of Minnesota, National Center on Educational Outcomes.

- This user's guide is intended to assist in the development of a system of outcomes and indicators to evaluate educational results in schools, school districts, and States.

- The guide provides step-by-step guidance through a process to create a system of outcomes and indicators, using resource tools developed at NCEO with four steps that lead to a system of outcomes and indicators. It uses resource tools developed at NCEO that lead to a system of outcomes and indicators by establishing a solid foundation; developing, adopting, or adapting a model; establishing a data collection and reporting system; and installing the system.

- State Education Agencies (SEAs) have begun to use the NCEO model of outcomes and indicators in a number of ways. For example, in one State, SEA personnel collect data on the extent to which students accomplish instructional objectives specified in their individualized programs (IEP). The SEA expects to develop a report on educational accomplishments for students with disabilities following the outline of domains in the NCEO model.

- In another State, educators use the NCEO model to develop transition IEPs for students with disabilities, requiring transition teams to develop objectives in each of the eight outcome domain areas in the NCEO model.

- In another State, educational personnel group IEP objectives on the basis of the NCEO model and then use curriculum-based measurement approaches to monitor progress toward those objectives.

- Another SEA holds a statewide competition among its school districts. The winning school districts produce report cards of the educational progress of students with disabilities based on the NCEO model.

Ysseldyke, J. & Thurlow, M. (Eds). 1993. *Views on inclusion and testing accommodations for students with disabilities*. Synthesis Report 7. Minneapolis, MN: University of Minnesota, National Center on Educational Outcomes.

- This document includes a set of contributed papers regarding inclusion/exclusion and accommodation issues.

- Bob Algozzine, University of North Carolina-Charlotte, stated that excluding any student from testing violates the spirit and practice of inclusion. He also opposed the practice of substituting progress on an IEP for State and national testing results. Accommodations or modifications offered to one students should also be available to all students.

- Paul Koehler, Arizona Department of Education, indicated that removing students in special education from State and national accountability testing results in removal from the "curriculum track" since IEP goals are often unrelated to regular education goals. The Arizona Student Assessment Program has tried to include nearly all students with IEPs by developing modified (mediated) forms of the assessments. Arizona guidelines on "mediated assessment" provide accommodations that mirror, as closely as possible, "normal" instructional adaptations.

- Barbara Loeding and Jerry Crittenden, University of South Florida, discussed the technical issues of assessing educational outcomes of students who have hearing impairments or deafness. Accommodations and participation in State and national testing should depend on the student(s) primary mode of communication, prior use of an interpreter, and functioning level or amount of hearing loss.

- Jack Merwin, University of Minnesota, argued that it is acceptable to exclude children with disabilities from State and national testing because of their small numbers. In addition, excluding students with disabilities affect group averages less than excluding other subgroups (e.g., low socioeconomic status).

- Dan Reschly, Iowa State University, indicated that high stakes testing leads to unwarranted exclusion of children with disabilities. using subtle methods of exclusion. He also explored the advantages and disadvantages of three inclusion/exclusion policy alternatives for high stakes State and national assessment (full exclusion, full inclusion, allowing a 2% rate of exclusion of students). The implementation of liberal accommodations policies would increase the perception of fairness and credibility of assessment programs.

- Maynard Reynolds, University of Minnesota, argued for fully inclusive assessment practices in the domains of language, mathematics, social skills, and self-dependence, with acceptable test results gathered from 95% of the pupils. The remaining 5% of the students should be assessed through alternative testing, adaptive measurement procedures, or teacher judgments.

Ysseldyke, J. & Thurlow, M. 1993. *A conceptual model of educational outcomes for children and youth with disabilities*. Working paper 2. Minneapolis, MN: University of Minnesota, National Center Educational Outcomes.

- This paper provides a summary of a conceptual model of educational outcomes for students with disabilities which has evolved over time through input from many individuals and groups.

- Educational outcomes are defined as the result of interactions between individuals and schooling experiences. An enabling outcome is defined as the result of interactions between individuals and life experiences that provide the individual with the opportunity to reach educational outcomes.

- Two enabling outcome domains are included -- Presence/Participation (the extent to which an individual is located in a particular setting and the extent to which actual participation occurs) and Accommodation/Adaptation/Compensation (modifications in performance that must be made to adjust to or make up for some type of disability).

- Six domains of educational outcomes are included within this conceptual model: Literacy, Contribution, Physical/Mental Health, Independence/ Responsibility, Social/behavioral Skills, and Satisfaction.

- Indicators of the various outcome domains were also provided.

- This document provided several fundamental assumptions guiding the ongoing activities of NCEO:

  - A model of outcomes is needed for all students. At the broadest level, it should apply to all students regardless of the characteristics of individuals (including both intended and unintended outcomes; as well as direct and indirect outcomes).
  - Indicators of outcomes for students receiving special education services should be related, conceptually and statistically, to those identified for students without disabilities.
  - Indicators should be unbiased with respect to gender, culture, race, and other characteristics of the diversity of students in today's school population.
  - While indicators should meet research standards, those that do not could still be used.
  - A comprehensive system of indicators should provide data needed to make policy decisions at the State and national levels.

Ysseldyke, J.,Thurlow, M., & Gilman, C. 1993. *Educational outcomes and indicators for early childhood (Age 6)*. Minneapolis, MN: University of Minnesota, National Center on Educational Outcomes.

- Outcomes and lists of possible indicators for school completion outcomes for early childhood (age 6), which were identified through the consensus-building process, are provided within the following eight outcome domains: (1) Presence and Participation; (2) Accommodation and Adaptation,; (3) Physical Health,; (4) Responsibility and Independence; (5) Contribution and Citizenship; (6) Academic and Functional Literacy; (7) Personal and Social Adjustment; and (8) Satisfaction.

- Sample sources of data for the Contribution and Citizenship outcome domain are also provided.

Ysseldyke, J., Thurlow, M. & Gilman, C. 1993. *Educational outcomes and indicators for early childhood (Age 3)*. Minneapolis, MN: University of Minnesota, National Center on Educational Outcomes.

- Outcomes and lists of possible indicators for school completion outcomes for early childhood (age 3), which were identified through the consensus-building process, are provided within the following eight outcome domains: (1) Presence and Participation; (2) Accommodation and Adaptation; (3) Physical Health; (4) Responsibility and Independence; (5) Contribution and Citizenship; (6) Academic and Functional Literacy; (7) Personal and Social Adjustment; and (8) Satisfaction.

- Sample sources of data for the Presence and Participation outcome domain are also presented.

Ysseldyke, J., Thurlow, M., & Gilman, C. 1993. *Educational outcomes and indicators for individuals at the post-school level*. Minneapolis, MN: University of Minnesota, National Center on Educational Outcomes.

- Outcomes and lists of possible indicators for school completion outcomes for individuals at the Post-School level, which were identified through the consensus-building process, are provided within the following eight outcome domains: (1) Presence and Participation; (2) Accommodation and Adaptation; (3) Physical Health,; (4) Responsibility and Independence; (5) Contribution and Citizenship; (6) Academic and Functional Literacy; (7) Personal and Social Adjustment; and (8) Satisfaction.

- Sample sources of data for the Responsibility and Independence outcome domain are also presented.

Ysseldyke, J., Thurlow, M., & Gilman, C. 1993. *Educational outcomes and indicators for students completing school*. Minneapolis, MN: University of Minnesota, National Center on Educational Outcomes.

- Outcomes and lists of possible indicators for school completion outcomes for students completing high school, which were identified through the consensus-building process, are provided within the following eight outcome domains: (1) Presence and Participation; (2) Accommodation and Adaptation; (3) Physical Health; (4) Responsibility and Independence; (5) Contribution and Citizenship; (6) Academic and Functional Literacy; (7) Personal and Social Adjustment, and (8) Satisfaction.

- Sample sources of data for the Contribution and Citizenship outcome domain are also presented.

Ysseldyke, J., Thurlow, M., McGrew, K., & Vanderwood, M. 1994. *Making decisions about the inclusion of students with disabilities in large-scale assessments: Report on a working conference to develop guidelines on inclusion and accommodations.* Minneapolis, MN: University of Minnesota, National Center on Educational Outcomes.

- This report is a summary of a meeting held in March, 1994, to discuss inclusion of students with disabilities in national and State large-scale assessments. Issues addressed include adaptations in assessments or assessment procedures for students with disabilities, developing a reasonable set of inclusion and accommodation decision guidelines, and identifying other major technical and implementation issues.

- Assumptions underlying guidelines for making inclusion and accommodation decisions include: accuracy and fairness, capability of providing information on students with disabilities, sensitivity to the needs of students with disabilities, high standards for all, practically and cost effectiveness issues, and consistency with assessment to students' instructional programs and accommodations.

- Current NAEP guidelines for making inclusion/exclusion decision are problematic in the use of percentage of time in the mainstream setting, and reliance on the IEP team (or some designated person) to make decisions about "meaningful participation" in assessments.

- Students with disabilities must be included in all reporting of results.

- Rather than using a percentage of time the child spends in the mainstream as a measure, a better indicator would be the type of curriculum used by the students.

- Students with disabilities need to be included during the item development process for NAEP and State assessments in order to provide test developers information regarding ceiling and floor effects and to identify problematic items without adaptation.

- The notion of assigning zero scores to students excluded from testing was not considered acceptable by meeting participants. Rather, consistent with the principle of inclusion, students with disabilities must be actually assessed.

- There are three types of students with disabilities within the assessment process: those who can take large-scale assessments with no accommodations, those who can be included with adaptations/accommodations, and those who need alternative assessments.

- There should be an immediate step to encourage school districts to include in NAEP more students with disabilities who do not need accommodations, and to permit modifications that should not affect the validity of the test.

- There is a need to monitor exclusion of students with disabilities.

- The group made three recommendations regarding inclusion decisions: (1) include students with disabilities when trying out items to identify problematic item formats and the need for more items at the lower end; (2) include all students with disabilities in taking some form of assessment, (3) and include students with disabilities in the reporting of results.

- Initially, the modifications that can be made include making a student more comfortable and secure in test setting. Other modifications that raise technical questions should be studied; e.g., presentation alternatives, response alternatives, setting alternatives, and timing/scheduling alternatives.

- In addition to conducting and reporting results of follow-up studies of currently excluded students and removing incentives for exclusion, the group recommended that a panel be set up to review requests for new forms of testing modifications.

Conclusion

The above annotated bibliography of selected documents and reports related to special education program evaluation is intended to provide background information to stimulate discussion for participants attending the September Program Evaluation Forum. The full text of these documents and reports is significantly richer than the summaries provided. The reader is referred to the actual documents and reports for additional information.